



Bozeman Fish Technology Center Bozeman, Montana *Conserving America's Fisheries*

MISSION

To conduct research and provide technical assistance to Federal, State and other partners in solving aquatic resource issues of regional and national importance.

CENTER INFORMATION

In 1892, the Bureau of Fisheries established the Bozeman National Fish Hatchery in southwestern Montana. In 1966, this hatchery ceased rainbow trout production and became a research center focused on traditional fish culture. Today's Center conducts a diversity of research. The Center, located on Highway 86 in Bozeman, includes 171 acres along Bridger Creek adjacent to the Gallatin National Forest. Several historic structures still exist. Warm and cold springs feed several fish culture buildings. Bridger Creek water supplies a small pond. The Center has a feed laboratory and the new 16,500 square foot Robert G. Piper laboratory and administrative building. The Center receives more than 5,000 visitors a year to walk, tour or visit this beautiful facility.



Excellence in Science

A little over two years ago, Linda Beck, microbiologist and staff researcher, kicked off the Center's Aquatic Nuisance Species and Aquatic Ecosystem Health program. Her work currently focuses on Hazard Analysis and Critical Control Point (HACCP) planning and immunology of threatened and endangered fish species. HACCP plans describe protocols to stop the spread of Aquatic Nuisance Species. Linda has traveled to nearly 20 Fisheries field stations in the Northwest and Mountain-Prairie Regions to develop HACCP plans. She is now working with Ecological Services, another division of the US Fish and Wildlife Service to assist with their HACCP plans.

Linda conducts fish immunology research in collaboration with Dr. Dušan Palić from Iowa State University, Dr. Deborah Iwanowicz and Luke Iwanowicz from USGS Leetown Science Center using innovative technologies. Their work identifies the mechanism of fish immune response at a cellular level during episodes of stress and disease in sturgeon, cutthroat trout, Arctic grayling and June suckers. This research complements Center studies on fish physiology and rearing conditions like diet, density and temperature. This research could lead to use of less invasive techniques for evaluating and understanding fish health and immune response.

MOSS partners with Center

In July, Montana Outdoor Science School (MOSS) moved their administrative offices to Center grounds as part of an expansion of their partnership with the Center. MOSS has been sponsoring outdoor science programs at the Center for nearly a decade including the annual Watershed Festival and Make-a-Splash Day. By moving to the Center, MOSS is provided office space and has access to a spectacular array of natural areas for use as outdoor classrooms. In return, the Center will gain assistance with outreach and can host and participate in outdoor education programs for children and adults.



Tyler Gilleen, the son of the Center's maintenance mechanic, enjoys the Festival activities.

Region



CENTER RESEARCH PROGRAMS

- Reproductive Physiology
- Pallid Sturgeon Research
- Fish Nutrition and Feed Development
- Traditional Fish Culture
- Sensitive Fish Species Conservation
- Water Treatment Systems
- Aquatic Nuisance Species
- Aquatic Ecosystem Health

The community benefits from this partnership through increased use of public trails and natural areas as well as interpretation of the Center's science and research program, coordinated by education professionals. In the future, this partnership could lead to community projects like a nature center or outdoor venue to host educational events.

To learn more about MOSS, go to:
<http://www.outdoorscience.org>

Center Contact Information
Bozeman Fish Technology Center
4050 Bridger Canyon Road
Bozeman, MT 59715
Phone: 406-994-9900
Fax: 406-586-5942

For the Public

Public welcome! Many visitors come to tour the Center to see the fish and experience the diverse natural setting.



TRAILS UPDATE

More than 40 volunteers from the community along with Center employees showed support for our nature trail system by pulling invasive weeds, cleaning the trail of overgrown grass and weeds, pulling old fence posts, removing barbed wire and placing natural fines on the trail surface during National Public Trails Day. This event was held in conjunction with Gallatin Valley Land Trust (GVLT). A private donation to GVLT enabled a connecting trail to be blazed from the Center's upper parking lot to the existing nature trail behind the Piper Building. **Come join us for the 3rd Annual National Public Land Day September 29.**

COMMUNITY INVOLVEMENT



Boy Scout, Brad Floener obtained his Eagle Scout badge by constructing an information kiosk. Leader, Mike Costle aided Brad in pursuit of his badge. Brad demonstrated excellent leadership skills in organizing this project and obtaining all supplies through donations from the community. Good luck at MSU Brad!

FACILITY TOURS & FUNCTIONS

Group or family tours can be scheduled by calling 406-994-9951 **at least 2 weeks in advance**. Please leave a phone number, where you can be contacted. Your tour will be confirmed by phone. This number can also be used to schedule use of the Robert G. Piper conferencing facility or Center grounds for an agency function, community event or meeting. **Scheduling must be at least 1 month in advance.**

FRIENDS of BFTC

Friends of the Bozeman Fish Technology Center help through **volunteering, community involvement, education and fundraising**. If you have an interest in being a Friend or receiving information about the **Friends Group**, please contact Linda Beck 406-994-9947.

Sue Osborne Retires

Sue Osborne, the Center administrative assistant retired at the end of May. She worked at the Center since 1998 and has more than 20 years in federal service. Sue has received numerous awards during her time at BFTC and was integral to budget tracking. Her financial skills enabled the Center to keep on budget and remain fiscally responsible.

Thank you Sue for your service and may you enjoy being a snow bird.



You never know when a moment and a few sincere words can have an impact on a life. – Zig Ziglar



BROWN BAG LUNCH SEMINAR

Every week from September through May, the Center sponsors seminars by local experts and professionals on topics related to aquatic and fisheries sciences. If you are interested in presenting information or want to be on the mailing list for a calendar of seminars contact Molly Webb at 994-9907.



For more information, please contact: Linda Beck, Outreach Coordinator 406-994-9947 or by email: linda_beck@fws.gov

Issue 5 – July 2007

Behind the Scenes

- The Tech Center received the 2007 Missouri River Champions Award from the Missouri River Natural Resources committee for contributing leadership and expertise in pallid sturgeon and other native fish recovery efforts.
- Cal Fraser attended the Fisheries Academy at NCTC and loved it!
- Greg Kindschi and Bill Krise taught sections of the Cold Water Fish Culture class at the agency training center in West Virginia.
- Matt Toner and Eli Cureton both welcomed new babies to their homes since the new year.
- Molly Webb and Kevin Kappenman assisted with spawning of pallid sturgeon in Montana.
- The containment building had a UV upgrade which disinfects water.
- Mariah Talbott, Center lab technician, will begin research as an MSU PhD student.
- While Jon Gilleen, Center Maintenance Mechanic, recovers from a broken foot, the Center has hired Todd Lushin to assist Jon with maintenance.
- Cal Fraser traveled to Hagerman, ID to set up a water quality monitoring unit and to train University of Idaho employees on its use.
- Jason Ilgen reported damage to the Warm Springs box in April due to a rockslide. Repairs will begin in the fall.



TECHNICAL ASSISTANCE

The Center provides technical assistance to National Fish Hatcheries, Fish Management Offices and assists state, tribal and non-governmental organizations in:

- Fish spawning and reproduction
- Histological analysis
- Sturgeon eco-physiology
- Specialized feed development
- Fish tissue and feed analysis
- Water treatment & recirculating systems
- Traditional fish culture
- Aquatic Nuisance Species
- Aquatic Ecosystem Health
- Teaching and training courses in
 - Cold Water Fish Culture
 - Fish physiology
 - Aquatic Nuisance and HACCP
 - Water Treatment Processes